CLAIMS

1.

A method for detecting containers, e.g. bottles of glass or plastics, or cans made of metal, wood, glass or plastics, which for recycling of materials thereof or reuse thereof are moved in a lying posture and with their axis parallel to direction of transport into or past a detection zone associated with a detector station containing a video camera, a video image analysis of the container being carried out by a video image analyzer, and said detector station having an entrance and an exit, comprising the steps of:

a) analyzing a sequence of video images of the container whilst it is moved into or past the detection zone of the video camera,

b) determining position and movement of the container in a viewing region of the video camera on the basis of continuous detection of position and movement of the container in the video image,

c) determining direction of movement of the container relative to the detector station, and

d) either causing an alarm if the container is moved from a position downstream of the detector station exit to a position in the detector sector or zone, or causing no movement direction alarm if the container is moved from a position upstream of the detector station entrance and into the detection zone.

2.

A device for detecting containers, e.g. bottles of glass or plastics, or cans made of metal, wood, glass or plastics, which for recycling of materials thereof or reuse thereof are moved in a lying posture and with their axis parallel to direction of transport into or past a detection zone associated with a detector station containing a video camera, a video image analysis of the container being carried out by a video image analyzer, and said detector station having an entrance and an exit, wherein:

a) the video image analyzer is connected to the video camera in order to analyze a sequence of video images of the container whilst the container is conveyed into or past the video camera detection zone,

b) the video image analyzer contains a position detector for determining position and movement of the container in a viewing region of the video camera on the basis of continuous detection of position and movement of the container in the video image, and

c) the position detector is further adapted to for determining direction of movement of the container relative to the detector station, and either causing a movement direction alarm if the container is moved from a position downstream of the detector station exit

to a position in the detector sector or zone, or causing no movement direction alarm if the container is moved from a position upstream of the detector station entrance and into the detection zone.

3.
A device according to claim 2, wherein said device forms part of a return vending machine.